

#### STATE OF TENNESSEE

# DEPARTMENT OF ENVIRONMENT AND CONSERVATION State Revolving Fund Loan Program

L & C Tower, 8<sup>th</sup> Floor 401 Church Street Nashville, TN 37243

#### FINDING OF NO SIGNIFICANT IMPACT AMENDMENT

Approval of Facilities Plan Amendment
Water Authority of Dickson County (Williamson County), Tennessee
Project No. SRF 2006-194

#### **December 15, 2008**

The National Environmental Policy Act requires federally designated agencies to determine whether a proposed major agency action will significantly affect the environment. One such major action, defined by Section 511(c)(1) of the Clean Water Act, is the approval of a facilities plan prepared pursuant to Title VI of the Clean Water Act. In making this determination, the State Revolving Fund (SRF) Loan Program assumes that all facilities and actions recommended by the plan will be implemented. The State's analysis concludes that implementing the plan will not significantly affect the environment; accordingly, the State Revolving Fund Loan Program is issuing this Finding of No Significant Impact (FNSI) Amendment for public review.

A previous FNSI, dated October 2, 2007, included replacing the mechanically cleaned bar screen at the headworks; repairing the existing grit chamber; and the addition of disks to the existing rotors in the existing oxidation ditch, flow paced feed pumps to add coagulant prior to the existing clarifiers, cloth media filter after the existing clarifiers, and a new sludge pumping station at the Fairview wastewater treatment plant (WWTP) and the installation of approximately 12,000 linear feet of 4-inch diameter forcemain to transport digested sludge from the existing aerobic digestor to the Jones Creek wastewater treatment plant for processing. A copy of the previous FNSI may be viewed at the offices of the State Revolving Fund Loan Program.

This FNSI Amendment addresses a reduction in scope for the project. The project now includes the addition of recirculation pumps for the oxidation ditch, an influent bar screen, and a return sludge meter and the replacement of the existing grit chamber at the Fairview WWTP and adding a variable frequency drive to the existing Horn Tavern pumping station. The figure showing the project location is attached.

Attached is an Environmental Assessment Amendment containing detailed information supporting this action. Comments supporting or disagreeing with this proposed action received within 30 days of the date of this FNSI Amendment will be evaluated before we make a final decision to proceed. If you wish to comment or to challenge this FNSI Amendment, send your written comment(s) to:

# ENVIRONMENTAL ASSESSMENT AMENDMENT Water Authority of Dickson County (Williamson County), Tennessee Project No. SRF 2006-194

### **December 15, 2008**

Mr. Sam R. Gaddipati, Manager State Revolving Fund Loan Program Tennessee Department of Environment and Conservation L & C Tower, 8th Floor Nashville, TN 37243

or contact him by telephone at (615) 532-0445 or by e-mail at <a href="mailto:sam.gaddipati@state.tn.us">sam.gaddipati@state.tn.us</a>.

# ENVIRONMENTAL ASSESSMENT AMENDMENT Water Authority of Dickson County (Williamson County), Tennessee Project No. SRF 2006-194

**December 15, 2008** 

### A. PROPOSED FACILITIES AND ACTIONS; FUNDING STATUS

A previous Environmental Assessment (EA), dated October 2, 2007, included replacing the mechanically cleaned bar screen at the headworks; repairing the existing grit chamber; and the addition of disks to the existing rotors in the existing oxidation ditch, flow paced feed pumps to add coagulant prior to the existing clarifiers, cloth media filter after the existing clarifiers, and a new sludge pumping station at the Fairview WWTP and the installation of approximately 12,000 linear feet of 4-inch diameter forcemain to transport digested sludge from the existing aerobic digestor to the Jones Creek wastewater treatment plant for processing. A copy of the previous EA may be viewed at the offices of the State Revolving Fund Loan Program.

This EA Amendment addresses a reduction in scope for the project. The project now includes the addition of recirculation pumps for the oxidation ditch, an influent bar screen, and a return sludge meter and the replacement of the existing grit chamber at the Fairview WWTP and adding a variable frequency drive to the existing Horn Tavern pumping station. The figure showing the project location is attached.

### **B. REASONS FOR CHANGE**

Since the original Facilities Plan was submitted and approved, operational improvements have been made to the Fairview Wastewater Treatment Plant. Operational improvements include installation of four surface aerators in the oxidation ditch that enhance nitrification resulting in effluent ammonia-nitrogen concentrations averaging below 1 milligram/liter (mg/L), intermittent operation of oxidation ditch rotors to provide anoxic conditions that promote denitrification, and discharge of waste sludge via truck transportation directly into the new Fairview force main that diverts a portion of the Fairview wastewater flow from the Fairview WWTP to the Jones Creek WWTP in the Dickson area. Also, this new force main diverts approximately 100,000 gallons per day of wastewater from the Fairview WWTP to the Jones Creek WWTP. These operational improvements and the diversion of a portion of the wastewater flow have enabled the Fairview WWTP to meet its NPDES discharge limit.

Since the Fairview WWTP is now meeting the NPDES limits, the original improvements called for in the original Planning Document will not be required. The improvements called for in the Facilities Plan Amendment are needed for continued satisfactory operation of the Fairview WWTP. The existing bar screen needs replacement as well as the existing grit chamber. Recirculation pumps at the oxidation ditch will enhance denitrification. The return sludge meter will allow for measurement of return activated sludge. The variable frequency drive at the Horn Tavern Pumping Station will help to equalize the incoming wastewater flow.

## C. ENVIRONMENTAL CONSEQUENCES; MITIGATIVE MEASURES

During the construction phase, short-term environmental impacts due to noise, dust, mud, disruption of traffic, runoff of silt with rainfall, etc., are unavoidable. Minimization of these impacts will be required; however, many of these minimization measures will only be temporary. Using the following measures to prevent erosion will minimize impacts on the environment:

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### **December 15, 2008**

- 1. Specifications will include temporary and permanent measures to be used for controlling erosion and sediment.
- 2. Soil or landscaping maintenance procedures will be included in the specifications.
- 3. The contractor will develop an Erosion Control Plan. It will contain a construction schedule for each temporary and permanent measure controlling erosion and sediment. It will include the location, type, and purpose for each measure and the times when temporary measures will be removed or replaced.

These measures, along with requiring the contractor to return the construction site to as-good-as or better-than its original condition, will prevent any adverse impacts due to erosion.